

HIGH FRONTIER

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START II Hoopla

Daniel O. Graham
Lt. Gen., USA (Ret.)

The successful rush to completion of the START II Treaty may be considered the crown jewel of the Bush Administration, but on closer scrutiny it's just a rhinestone. Eight or ten years from now, we may be faced with 3,000 instead of 10,000 nuclear warheads aimed at our vitals — that is, if everything goes right.

Having everything go right includes the full cooperation of the other three nuclear-armed ex-Soviet states: Belarus, Kazakhstan and Ukraine. This cooperation has not been secured. Ukraine is balking on START I, and that treaty must be ratified by Kiev before START II has any real effect. Further, having everything go right means that the Yeltsin government, or one with the same attitude towards arms cuts, remains in power in Moscow — an increasingly iffy proposition. The world scene will change, perhaps radically over the next eight to ten years. The size and composition of nuclear forces will be shaped more by those changes than by START II.

Not surprisingly, the media has reacted to the START II agreements with fulsome praise. Arms-control aficionados, both in and out of government, are enthusiastic. But they miss a point

proven by history; arms-control deals are hard to come by when they are valuable, and easy to come by when they mean little. Today they mean little.

Over the years, the media and the public have been conditioned to believe that arms-control agreements are of great importance and great benefit. In particular, they have been led to believe by the administrations that have negotiated arms-control agreements that limiting or reducing the numbers of nuclear weapons and delivery systems in the arsenals of the superpowers was a triumph of diplomacy, reduced the costs of maintaining the strategic balance, and provided assurances against nuclear war. No arms control deal with the Soviet Union, ratified or not, has produced these presumed benefits.

Laird got his cheap (or so it seemed) nuclear policy, which allowed the Soviets to play nuclear catch-up without worrying about U.S. ABMs.

Arms control agreements with the Soviet Union tended to codify the trends and realities of the times in which they were negotiated rather than to curb competitions. With or without these agreements, ongoing events and policies drove towards the same end results. For example, the ban on atmospheric nuclear testing in 1963 was driven more by internal policies than a desire to promote peace and arms control. The United States was already ending its atmospheric test program, finding the political fallout more harmful than the

radioactive sort, and both sides desired to move their tests underground. Also, more expensive, underground tests were easier to keep secret than atmospheric tests.

The ABM Treaty also reflected the realities of 1972. Then-Secretary of Defense Melvin Laird wanted to avoid the costs of strategic defense. He hoped that the Soviets would go along with his theory of Mutually Assured Destruction (MAD), which assumed that both sides would be content with a limited number of city-busting nuclear weapons if their cities were unprotected. Another reality was the Soviet desire to offset the U.S. advantage in bombers with a ballistic missile build-up. The Soviets also realized that U.S. anti-missile systems were superior to theirs, and that their resources would not stretch to cover both offensive and defensive build-ups. So Laird got his cheap (or so it seemed) nuclear policy, which allowed the Soviets to play nuclear catch-up without worrying about U.S. ABMs.

The ABM Treaty never checked the build-up of nuclear missiles. Eventually the U.S. was forced to pursue enormously expensive deployment schemes to save some of its retaliatory nuclear weapons from a Soviet first strike. It didn't even stop the Soviets from providing ABM defenses for their prime population center, Moscow, and preparing for a country-wide missile defense system, violating the ABM Treaty as necessary. With the realities of 1972 at work, the

Inside This Issue:

In The News	2
Amb. Cooper's Farewell	4
Capitol Hill Closeups	5

Continued on page 6

In The News

SDIO Cancels 10 Brilliant Pebbles Test Flights

"We really are moving away from deploying Brilliant Pebbles," remarked Col. Rhip Worrell, former director of the Brilliant Pebbles program. He was talking about the SDIO decision to cancel 10 Brilliant Pebbles test flights; budget cuts, launch failures, and the election of an administration that supports a ground-based system over space-based interceptors have caused the reductions.

Of the canceled flights, nine were planned by Lawrence Livermore National Laboratory to evaluate overall technology feasibility of the Brilliant Pebbles program, and one suborbital test flight was to assess spacecraft design.

\$576 million was requested by President Bush for Brilliant Pebbles in 1993; Congress, however, approved only \$246 million.

—*Space News*

SDI Technology Useful In Civilian Activities

"At SDIO in the past year, as we develop permissible test applications, I've seen increased emphasis on moving our technology into the civil and commercial space area," stated Jordan Katz, assistant to SDIO's deputy for technology in a recent speech.

"In demonstrating the technology of missile defense, we find we're able to support various civil and commercial space agendas," continued Katz.

Many projects being researched at SDIO could be utilized by NASA for its planetary landing craft program including missile interceptor fairings, throttle and propulsion systems, and light-weight sensors.

In addition, direct energy technology may be useful for future space telescopes and research

involving hypervelocity interceptors may be used in advanced transportation technology.

Other examples of research currently under development at SDIO that could be beneficial to civilian space use are materials and structures, solar cells, advanced optics, batteries, focal plane arrays, propulsion and microelectronics.

"By working with the scientific community, SDIO-sponsored technology could enhance or contribute to a real national need at this time," commented Katz.

—*Military Space*

Aspin's Thoughts on SDI

In response to written questions submitted to him by the Senate Armed Services committee during his confirmation hearings, new Defense Secretary Les Aspin explained his views on the future of the Strategic Defense Initiative.

Aspin indicated that he supported a program of equal proportions that would include ground-based and theater missile defenses and "advanced follow-on strategic defense technologies, as insurance against unexpected developments."

He also stated that he believed that this configuration of the program could be funded at a level below the \$7 billion currently in the budget by "reductions in the Brilliant Pebbles program and [that] it should be accorded a less prominent place in overall SDI planning."

(A Congressional source places the funding level at below \$4 billion, and not the \$7 billion noted above.)

—*Defense Week*

Pakistan Nuclear Bombs Confirmed By Russians

"Pakistan was in possession of its first atomic bomb in 1986 and has

meanwhile accumulated four to seven of them," states a report released by Yevgeny Primakov, director of the Russian Foreign Intelligence Service (FIS) confirming Pakistan's ownership of four to seven nuclear bombs.

Pakistan was able to produce enough weapons-grade uranium to build 12 nuclear bombs

In its report, FIS states that during the early 70s, nuclear expert Abdul Kadir-Khan assisted Pakistan in the formation of its nuclear weapons project.

After obtaining uranium from West Germany and the technology needed to build a uranium enrichment plant from the Netherlands, Pakistan was able to produce enough weapons-grade uranium to build 12 nuclear bombs in its plant near Islamabad by 1984. Production of heavy water and fuses also began at this time.

The Pakistani government denies this report as it does a earlier released statement by the CIA that made a similar claim.

(See "The Third World Missile Threat" in the January issue of *Newswatch*.)

—*The Washington Times*

Iraq's Shady Activities

Dual use technologies have been used by Iraq to build its military arsenal.

Iraqi representatives have purchased companies, obtained loans, and hired personnel trainers in Saddam Hussein's effort to develop chemical weapons, missile technology and nuclear capabilities.

"If they couldn't buy the goods, they'd buy machines to make the goods. If they couldn't buy that, then they'd try to buy or invest in the company that makes the

In The News

machines," says R. Richard Newcomb, director of the Treasury Department's Office of Foreign Asset Control.

Many of the companies used by the Iraqis involved dual-use technologies—technologies that have military and civilian applications.

Some of the companies involved in the network include Matrix-Churchill Corp. (a British machine-tool company purchased by Iraqi representatives); a brass refinery constructed in Iraq that was bought from an United States industrialist, and XYZ Options, an Alabama organization responsible for building a highly modern carbide tool plant in Iraq.

Carbide plants can be used for producing automobile parts however, with additional computer equipment, they can be used to make the uranium and tungsten carbide components used in nuclear warheads. The ingots made by the brass refinery have been used in the construction of Iraqi howitzer shells.

So far, UN inspection teams have been unable to obtain full disclosure from the Iraqi government concerning sources within the network.

"They still refuse to give us their suppliers' lists. You absolutely have to have it. You want to be able to deny that network to anyone else. You want to know how they moved things around," commented David Kay, a former Central Intelligence Agency analyst who led UN inspection teams into Iraq.

—*Wall Street Journal*

Ukraine "Foggy" on Nuclear Future

"The lack of clarity over the nuclear weapons on the territory of Ukraine can of course influence nuclear security," warned Marshal Yevgeny Shaposhnikov,

commander of CIS forces, in response to the Ukrainian government's 'foggy' statements regarding the future of the nuclear weapons in its possession.

"I cannot get an answer to our question today on where the Ukraine stands"

Without Ukraine's cooperation, the START II treaty may never be effective in reducing strategic nuclear arms by 2003.

"Ukraine...at the present time has declared [only] that it will strive for non-nuclear status, and unfortunately I cannot get an answer to our question today on where the Ukraine stands," stated Shaposhnikov.

Ukrainian and Russian representatives will attempt to negotiate an agreement on issues ranging from financial compensation and Ukrainian sovereign security to disposal of the actual weapons.

—*The Washington Times*

Iraq Weapon Research Facility Under UN Scrutiny

Almost all of Iraq's best rocket scientists and engineers have been relocated to a large development facility outside of Baghdad according to UN officials.

"Iraq is employing its best engineers, scientists and managers in the missile area. . . It makes us very nervous to have all of the guys of any significance at one place," explained a spokesman for the UN Special Commission responsible for eliminating Iraq's weapons of mass destruction.

It is believed that they are there to continue their work on several different types of short range ballistic missiles allowed by the UN ceasefire agreement. "We don't think there's anything illegal going on there right now. But it would be

a very good place to cheat," said one U.S. official.

Many western observers are concerned that as time goes by, the scientists will attempt to revive Iraq's long-range ballistic missile program.

"All they need are knowledge, money and supplies. They clearly have lots of knowledge and they will eventually have money from the sale of the oil," commented Tim Trevan, a UN Special Commission spokesman.

—*The Washington Post*

MSTI-1 Flight Successful

The first Miniature Seeker Technology Integration flight (MSTI-1) was successfully launched recently from Vandenberg AFB in California. A spacecraft bus that will be used during upcoming MSTI test flights was analyzed throughout the six day mission.

Also tested was MSTI's mid-wavelength infrared sensor that was used to spot several Earth surface areas. Future tests will investigate the missile-tracking potential of space-based satellites.

—*Military Space*

Quote Note

"The SDI (Strategic Defense Initiative) is unnecessary. It's wasteful, and it's dangerous."

—Rep. Ron Dellums (D-CA), the new chairman of the House Armed Services Committee

Editor's Note

Now, we all feel so much safer... Not!

Ambassador Cooper Leaves SDIO

by John Hutt Cunningham

Ambassador Henry Cooper, Director of the Strategic Defense Initiative Organization under the Bush Administration, has issued his "End of Tour" report as his last act as Director of SDIO. The report is a review of the Ambassador's time as Director of the SDIO, including high points of the evolution of the program, and insights into the political situation surrounding SDI. The following are excerpts and summarizations from the report.

□

"I am satisfied on many counts. My March 1990 report recommended refocusing, which highlighted the need for defenses against limited attacks on a global basis — including an acceleration of Theater Missile defenses, has proved to be:

- **Timely** — the Gulf War validated the need;
- **Politically potent** — the Missile Defense Act has largely accepted the overall approach;
- **Internationally much more acceptable** — Presidents Bush and Yeltsin agreed to work toward a Global Protection System and NATO, the Western European Union, and individual nations (including former neutrals) are much more favorably considering a future role for defenses to deal with a real potential threat to their security; and
- **Technically viable** — without question, technology exists to achieve our stated goals."

But while the SDI program, driven by the Missile Defense Act, has gained a new respectability within the Pentagon as a serious acquisition program, it still faces stiff problems.

Ambassador Cooper said, "... while there is a strong bipartisan support for Theater Missile defenses, the fragile support for a U.S. homeland defense is threatened by disharmony, and misrepresentations propagated to advocate parochial interests. For example, statements to the contrary notwithstanding, space-based interceptors, which would be clearly affordable and effective in both a theater and U.S. homeland defense, constitute far less than 10% of our budget."

Cooper also said that if the political problems regarding Brilliant Pebbles could be resolved, BPs would provide the most versatile and inexpensive defense against ballistic missiles with ranges greater than about 300 miles.

Congressional backsliding on SDI is, and will continue to be, a serious problem. The program was dealt a significant setback during the FY 1993 budget process. The Congress eventually cut \$1.6 billion out of the program's funding request, down to \$3.8 billion — \$100

million less than the previous year. While the budget reaffirmed the Missile Defense Act, the severe cuts introduced instabilities, delays, and ultimately increased costs into the program.

"I believe that last year, a major reason for the lower priority given to funding a U.S. homeland defense was the belief that no ballistic missile threat, requiring a homeland defense, would develop for at least ten years, based at least in part on testimony by CIA Director Bob Gates. While I hope this speculation is correct, I believe such estimates to be very uncertain — and that additional nations indeed could gain the capability to threaten the United States sooner and before we can deploy a means to protect against such an attack ... the Scud-Patriot duel of the Gulf War graphically validated the future, indeed already present, need to protect against ballistic missile attack, the lives of Americans, our allies and friends on a world-wide, or global, basis."

Ambassador Cooper has made recommendations to the new Clinton Administration, and to his own successor at SDIO. For instance:

- Full funding be granted for both Theater Missile Defenses (TMD);
- Strategic Defense Initiative Organization should begin fielding advanced TMD (Theater Missile Defenses such as the Patriot) systems by 1996;
- Field initial homeland defenses by 2000;
- Insure continuity in the organizational and management structure of the program to ensure that the goal of providing the best possible missile defenses for the nation is met, even if the name is changed (as may happen under the new Administration);
- Clarify and re-examine, in-depth, any future possible missile threats;
- A high priority should be given to clarifying our rights under domestic and international law to develop fully effective defenses. If this is not done, and soon, the ABM treaty will unduly and unilaterally constrain the SDI and TMD programs.

"As we conclude the decade since President Reagan launched SDI on 23 March 1983, it is clear that we have made considerable progress toward meeting his challenge to achieve deep reductions in offensive nuclear weapons while developing effective defenses to defeat one of the most threatening weapons systems ever created — the ballistic missile armed with weapons of mass destruction. The technology has clearly advanced

Continued on page 6

Capitol Hill Closeups

by Maj. Gen. J. Milnor Roberts, AUS (Ret.)

After weeks of delay, caused by restructuring of the House Armed Services Committee and the change in leadership since the election, the Congressional subcommittees have been organized and 19 new members have been assigned.

The 103rd Congress House Armed Services Committee has six *subcommittees*. The Seapower and Strategic and Critical Materials subcommittee has been eliminated, and others have been renamed with two exceptions — Readiness and Military Installations and Facilities.

The former Procurement and Military Nuclear subcommittee is now called Military Acquisition; Research and Development has been changed to Research and Technology; Military Personnel and Compensation is designated Military Forces and Personnel; and Investigations is now the Oversight and Investigations subcommittee. The new committee members include:

Democrats

Elizabeth Furse – Oregon
Pete Geren – Texas
Jane Harman – California
Tim Holden – Pennsylvania
Don Johnson – Georgia
David Mann – Ohio
Paul McHale – Pennsylvania
Martin T. Meehan – Massachusetts
Bart Stupak – Michigan
Frank Tejeda – Texas
Robert A. Underwood – Guam

Republicans

Roscoe G. Bartlett – Maryland
Stephen E. Buyer – Indiana
Terry Everett – Alabama
Tillie K. Fowler – Florida
James M. Inhofe – Oklahoma
John M. McHugh – New York
James M. Talent – Missouri
Peter G. Torkildsen – Massachusetts

The primary subcommittees of special importance to *Newswatch* readers are Research and Technology, and Military Acquisitions. Their membership consists of the following:

Research and Technology Subcommittee

Patricia Schroeder, Chair – District 1 – Colorado
Roscoe G. Bartlett – District 6 – Maryland
James H. Bilbray – District 1 – Nevada
Glen Browder – District 3 – Alabama

Stephen E. Buyer – District – 5 – Indiana
Don Edwards – District 16 – California
Elizabeth Furse – District 1 – Oregon
James V. Hansen – District 1 – Utah
Jane Harman – District 36 – California
George Hochbrueckner – District 1 – New York
Duncan Hunter – District 52 – California
Earl Hutto – District 1 – Florida
John R. Kasich – District 12 – Ohio
H. Martin Lancaster – District 3 – North Carolina
Dave McCurdy – District 4 – Oklahoma
Martin T. Meehan – District 5 – Massachusetts
Bob Stump – District 3 – Arizona
James M. Talent – District 2 – Missouri
Frank Tejeda – District 28 – Texas
Peter G. Torkildsen – District 6 – Massachusetts

Military Acquisition Subcommittee

Ronald V. Dellums – Chair – District 9 – California
Neil Abercrombie – District 1 – Hawaii
Thomas H. Andrews – District 1 – Maine
Herbert H. Bateman – District 1 – Virginia
Randy “Duke” Cunningham – District 51 – California
Robert K. Dornan – District 46 – California
Lane Evans – District 17 – Illinois
Pete Geren – District 12 – Texas
Joel Hefley – District 5 – Colorado
Tim Holden – District 6 – Pennsylvania
James M. Inhofe – District 1 – Oklahoma
Marilyn Lloyd – District 3 – Tennessee
Ronald K. Machtley – District 1 – Rhode Island
David Mann – District 1 – Ohio
Frank McCloskey – District 8 – Indiana
Paul McHale – District 15 – Pennsylvania
Owen B. Pickett – District 2 – Virginia
Arthur Ravenel Jr. – District 1 – South Carolina
Jim Saxton – District 3 – New Jersey
Floyd Spence – District 2 – South Carolina
John M. Spratt Jr. – District 5 – South Carolina
Bart Stupak – District 1 – Michigan
John S. Tanner – District 8 – Tennessee
Gene Taylor – District 5 – Mississippi
Curt Weldon – District 7 – Pennsylvania ♦

START II Hoopla

Continued from page 1

ABM Treaty was stronger than the other half of SALT I, which put restraints on an offensive nuclear build-up. Under the SALT I "arms control" agreement, the Soviet nuclear arsenal eventually surpassed that of the U.S.

The never-ratified SALT II Treaty reflected the realities of 1978, raising the total number of weapons allowed to each side in a manner consistent with Soviet programs then under way. This time provisions were made for the United States to balance the equation with an elaborate and expensive deployment of the late-lamented MX missile.

The major realities reflected in the Intermediate-range Nuclear Forces Treaty, START I and START II are:

- The imminent decline in the usefulness of nuclear ballistic missiles signaled by President Reagan's determination through SDI to provide defenses against them, and
- The collapse of the Soviet system, and with it, the relevance of the size of nuclear weapons arsenals.

Given these realities, the nuclear attack forces of the United States and Russia were going to be reduced as superfluous to national interests. This has already happened without benefit of a treaty.

Thus, in layman's terms, the START II Treaty is "no big deal."

We can look at the results this way: If someone has been pointing one hundred shotguns at you for years, and agrees to reduce the number to thirty over the next decade, do you really have something to cheer about? And what if this shotgun wielder is inclined to sell some of his excess shotguns to gangsters who may

point them at you from another direction? Perhaps we should worry about START II rather than cheer it.

While concentrating on START II, the Bush Administration blew an opportunity to forge an agreement with Russia that would have been far more important. Russian President Boris Yeltsin agreed at the June Summit to pursue cooperation with other nations to provide a Global Protection System against nuclear missiles.

Here was a chance to make a fundamental strategic advance in global security by meeting and deterring a mutual threat posed by ballistic missile and mass destruction weapon proliferation.

Pulling the Russians, West Europeans and others into a defensive security system would have bolstered Yeltsin in his efforts to avoid troubles with his military-industrial complex, would have reduced the dangers from unauthorized or accidental missile launch, and discouraged the proliferation of ballistic missiles. Yeltsin apparently understood this when he agreed to "remove political obstacles" to such defenses, i.e., the ABM Treaty.

Not only did the Bush team fail to capitalize on this opportunity, its negotiators proposed in essence a ten-year *extension* of the prime obstacle to the Bush-Yeltsin agreement, the ABM Treaty. Instead, we got the START II Treaty, the rhinestone crown jewel of the Bush Administration, and with it, a lot of mindless hoopla about its significance. ♦

Ambassador Cooper Leaves SDIO

Continued from page 4

to the stage where affordable, cost-effective, viable defenses can be deployed; we have concluded historic arms reductions agreements (yet to be fully ratified); and Presidents Bush and Yeltsin have agreed jointly to pursue development and deployment of a Global Protection System.

"If we hold firm to these objectives and continue negotiating in a multinational context toward a Global Protection System ... there can be created a sound arms control and nonproliferation context that fosters effective defenses and deep reductions in offensive nuclear arms." ♦

We at High Frontier applaud the gallant defense of SDI by Hank Cooper over the past two years. He worked under some very trying circumstances. His refocus of the program to Global Protection Against Limited Strikes (GPALS) showed great strategic wisdom.

We are delighted to announce that Amb. Cooper will join High Frontier's Board of Directors.

Lt. Gen. Daniel O. Graham

Director, High Frontier



High Frontier Mourns Loss of Lt. Gen. George L. Monahan

Lt. General George Lennox Monahan, Jr., USAF (Ret., died of a heart attack on February 4, 1993 while traveling on business in San Jose, California. He will be sorely missed.

Gen. Monahan, a Falls Church, Virginia resident, was Vice President of Washington Operations for Loral Corporation. He joined Loral in 1991 after leaving the U.S. Strategic Defense Initiative Organization.

As Director of SDIO from 1989-90 he brought a practical approach to the concept of designing a space-based defensive system that could shield the nation against nuclear missiles.

He served his country for 35 years before retiring in 1990. His military career included flying 122 combat missions as a command pilot in Southeast Asia during the Vietnam War, work on developing the F-16 "Fighting Falcon" fighter, and a tour as assistant deputy chief of staff for systems with the Air Force Systems Command at Andrews Air Force Base.

His military awards and decorations include the Distinguished Service Medal, Legion of Merit with oak leaf cluster, Distinguished Flying Cross, Bronze Star Medal, Meritorious Service Medal, Air Medal with nine oak leaf clusters, and Air Force Commendation Medal.

Lt. Gen. Daniel O. Graham, Director of High Frontier, said, "I was shocked and saddened to hear of George Monahan's untimely death. Had it not been for his common sense and willingness to challenge his peers, the exciting progress toward Single-Stage-To-Orbit vehicles would not be underway. He has left his mark. I will miss him."

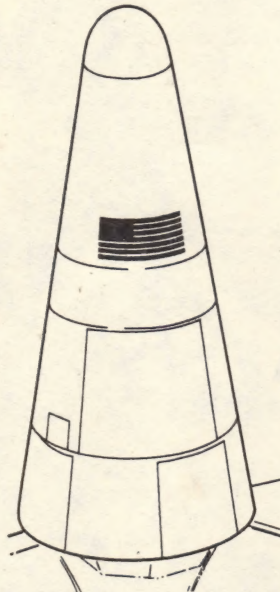
Countdown To The Dawn Of The True Space Age

As of 1 March 1993,

*This is the planned
DC-Y model of the
Delta Clipper.*

*This is the whole
rocket.*

*A single stage, it
throws nothing away.*



80 days and holding
to first test flight (sub-orbital) of DC-X.

A Reminder From Lt. Gen. Graham

For over ten years High Frontier has fought to make America more secure. It is our duty to publish the truth about strategic defense and the nation's safety. In such a spirit we ask you to remember High Frontier when making or revising your will. We, and American generations to come, will be most appreciative.



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